

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

CONFIRMATION NO. FIRST NAMED INVENTOR APPLICATION NO. FILING DATE ATTORNEY DOCKET NO. 10/709,806 2006579-0094 05/28/2004 Andre Kramer 3805 **EXAMINER** 24280 7590 04/14/2006 CHOATE, HALL & STEWART LLP MOORTHY, ARAVIND K TWO INTERNATIONAL PLACE **ART UNIT** PAPER NUMBER BOSTON, MA 02110 2131

DATE MAILED: 04/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
Office Action Summary	10/709,806	KRAMER ET AL.	
	Examiner	Art Unit	
	Aravind K. Moorthy	2131	
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet w	ith the correspondence address	
A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period. - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the main earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNI 1.136(a). In no event, however, may a od will apply and will expire SIX (6) MO oute, cause the application to become A	CATION. reply be timely filed NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on <u>08</u>	November 2005.		
• • • • • • • • • • • • • • • • • • • •	nis action is non-final.		
3) Since this application is in condition for allow	ance except for formal mat	ters, prosecution as to the merits is	
closed in accordance with the practice under	Ex parte Quayle, 1935 C.I	D. 11, 453 O.G. 213.	
Disposition of Claims			
4)⊠ Claim(s) <u>1-90</u> is/are pending in the application	on.		
4a) Of the above claim(s) is/are withdr	rawn from consideration.		
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1-90</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and	or election requirement.		
Application Papers			
9) The specification is objected to by the Exami	ner.		
10)⊠ The drawing(s) filed on <u>28 May 2004</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.			
Applicant may not request that any objection to the			
Replacement drawing sheet(s) including the corre			
11) The oath or declaration is objected to by the	Examiner. Note the attache	d Office Action or form PTO-152.	
Priority under 35 U.S.C. § 119			
12) ☐ Acknowledgment is made of a claim for foreignal ☐ All b) ☐ Some * c) ☐ None of:		§ 119(a)-(d) or (f).	
1. Certified copies of the priority documents have been received.			
 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage 			
·		received in this National Stage	
application from the International Bure * See the attached detailed Office action for a li		t received	
occ the attached actaned children for a n			
Attachment(s)			
1) Notice of References Cited (PTO-892)	·	Summary (PTO-413) (s)/Mail Date	
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date 	EV Notice of	Informal Patent Application (PTO-152)	

Application/Control Number: 10/709,806 Page 2

Art Unit: 2131

DETAILED ACTION

1. This is in response to the communications filed on 8 November 2005.

2. Claims 1-90 are pending in the application.

3. Claims 1-90 have been rejected.

Information Disclosure Statement

4. The information disclosure statement filed 16 August 2004 fails to comply with 37 CFR

1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent

literature publication or that portion which caused it to be listed; and all other information or that

portion which caused it to be listed. It has been placed in the application file, but the information

referred to therein has not been considered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 10, 26, 42, 56, 70 and 84 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite in that it fails to point out what is included or excluded by the claim language. This

claim is an omnibus type claim.

Claim Objections

6. Claim 64 is objected to because of the following informalities: typographical error. There is

no space between the words "comprises" and "transferring". Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-5, 8, 9, 12-14, 17-21, 24, 25, 28-30, 33-37, 40, 41, 44, 45, 48-51, 54, 55, 58, 61-65, 68, 69, 72-74, 77-79, 82, 83 and 86-88 are rejected under 35 U.S.C. 102(e) as being anticipated by Gusler et al U.S. Patent No. 6,938,057 B2.

As to claim 1, Gusler et al discloses a method for establishing a secure communication channel between a client and an application server, the method comprising the steps of:

- (a) obtaining, by a web server, a MIME type document and a ticket associated with a client, the MIME type document comprising a client application program, the ticket having an identifier and a session key [column 6 line 43 to column 7 line 24];
- (b) receiving, by a web browser, the MIME type document and the ticket from the web server [column 7 line 24 to column 8 line 33];
- (c) invoking, by the web browser, the received client application program [column 7 line 24 to column 8 line 33];
- (d) establishing an application communication channel between the client and the application server [column 7 line 24 to column 8 line 33];

Art Unit: 2131

- (e)transmitting, by the client application program, the identifier from the ticket to the application server over the application communication channel [column 7 line 24 to column 8 line 33];
- (f) obtaining, by the application server, a copy of the session key from the web server using the identifier [column 7 line 24 to column 8 line 33]; and
- (g) encrypting communications between the client application program and the application server over the application communication channel using the session key [column 7 line 24 to column 8 line 33].

As to claims 2, 18, 35 and 63, Gusler et al discloses that step (a) further consists of establishing a secure web communication channel between the web browser and the web server [column 6 line 43 to column 7 line 24].

As to claims 3, 19, 36, 50 and 64, Gusler et al discloses that step (c) further consists of transferring, by the web browser, the ticket to the client application program [column 6 line 43 to column 7 line 24].

As to claims 4, 20, 34, 49, 62 and 78, Gusler et al discloses that step (g) further comprises decrypting communications between the client application program and the application server using the session key [column 6 line 43 to column 7 line 24].

As to claims 5, 21, 51 and 65, Gusler et al discloses that step (a) further comprises receiving, at the web server, a request from the client to have an application program executed on the application server and to have output from the application program executing on the application server transmitted to the client application program [column 8, lines 34-44].

As to claims 8, 24, 40, 54, 68 and 82, Gusler et al discloses that step (c) further comprises installing the client application program for a first time on the client [column 8, lines 34-44].

As to claims 9, 25, 41, 55, 69 and 83, Gusler et al discloses that step (a) further comprises obtaining a ticket having an application server certificate for the identifier [column 6 line 43 to column 7 line 24].

As to claims 12, 28, 44, 58, 72 and 86, Gusler et al discloses that step (a) further comprises obtaining a ticket granting access to a previously authorized resource [column 6 line 43 to column 7 line 24].

As to claims 13, 29, 45, 73 and 87, Gusler et al discloses that step (e) further comprises transmitting a password to the application server [column 6 line 43 to column 7 line 24].

As to claims 14, 30, 74 and 88, Gusler et al discloses that step (a) further comprises obtaining the MIME type document from the application server [column 5, lines 28-57].

As to claim 17, Gusler et al discloses a client system for establishing a secure communication channel with an application server, the client system comprising:

a web browser associated with a client [column 6 line 43 to column 7 line 24];

a web server in communication with the web browser over a web communication channel, the web server obtaining a MIME type document and a ticket associated with the client, the MIME type document comprising a client application program, the ticket having an identifier and a session key [column 6 line 43 to column 7 line 24];

the web browser receiving, from the web server, the ticket and the MIME type document, the web browser invoking the received client application program [column 6 line 43 to column 7 line 24];

an application server, in communication with the client over an application communication channel, receiving the identifier from the client application program, and the application server, in communication with the web server, obtaining a copy of the session key by using the identifier [column 6 line 43 to column 7 line 24]; and

the application server and the client application program encrypting communications over the application communication channel using the session key [column 6 line 43 to column 7 line 24].

As to claim 33, Gusler et al discloses a method for establishing a secure communication channel with an application server, the method comprising the steps of:

- (a) receiving a MIME type document and a ticket from the web server, the ticket having an identifier and a session key, and the MIME type document comprising a client application program [column 6 line 43 to column 7 line 24];
- (b) invoking the received client application program [column 7 line 24 to column 8 line 33];
- (c) establishing an application communication channel with an application server [column 7 line 24 to column 8 line 33];
- (d)transmitting the identifier from the ticket to the application server over the application communication channel to provide the application server with

information for obtaining a copy of the session key [column 7 line 24 to column 8 line 33]; and

(e)encrypting communications to the application server over the application communication channel using the session key [column 7 line 24 to column 8 line 33].

As to claim 37, Gusler et al discloses that step (a) further comprises sending, to the web server, a request to have an application program executed on the application server and to receive output from the application program executing on the application server [column 7 line 24 to column 8 line 33].

As to claim 48, Gusler et al discloses a client system for establishing a secure communication channel with a client, the client system comprising:

a web browser in communication with a web server over a web communication channel, the web browser receiving, from the web server, a MIME type document and a ticket, the MIME type document comprising a client application program, the ticket having an identifier and a session key [column 6 line 43 to column 7 line 24];

a client application program invoked by the web browser [column 7 line 24 to column 8 line 33]; and

the client application program establishing an application communication channel with the application server, the client application program transmitting the identifier over the application communication channel, and the client application program encrypting communications to the application server over the

application communication channel using the session key [column 7 line 24 to column 8 line 33].

As to claim 61, Gusler et al discloses a method for establishing a secure communication channel with a client, the method comprising the steps of:

- (a) obtaining, by a web server, a MIME type document and a ticket associated with a client, the MIME type document comprising a client application program, the ticket having an identifier and a session key [column 6 line 43 to column 7 line 24];
- (b) transmitting, by the web server, the MIME type document and the ticket to a web browser over a web communication channel [column 7 line 24 to column 8 line 33];
- (c)invoking, by the web browser, the received client application program [column 7 line 24 to column 8 line 33];
- (d) establishing an application communication channel with the client [column 7 line 24 to column 8 line 33];
- (e) receiving, from the client application program, the identifier from the ticket over the application communication channel [column 7 line 24 to column 8 line 33];
- (f) obtaining a copy of the session key from the web server using the identifier [column 7 line 24 to column 8 line 33]; and

(g) encrypting communications to the client application program over the application communication channel using the session key [column 7 line 24 to column 8 line 33].

Page 9

As to claim 77, Gusler et al discloses a server system for establishing a secure communication channel with a client, the server system comprising:

a ticket service generating a ticket associated with a client, the ticket having an identifier and a session key [column 6 line 43 to column 7 line 24];

a web server in communication with the ticket service, the web server transmitting a MIME type document and the ticket to the client over a web communication channel, the MIME type document comprising a client application program [column 7 line 24 to column 8 line 33]; and

an application server receiving the identifier from the ticket from the client, obtaining a copy of the session key from the web server, establishing an application communication channel with the client, and encrypting communications to the client over the application communication channel using the session key [column 7 line 24 to column 8 line 33].

As to claim 79, Gusler et al discloses that the web server receives a request from the client to have an application program executed on the client's behalf and to have output from the application program, as it is executing, transmitted to the client [column 7 line 24 to column 8 line 33].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 6, 15, 16, 22, 31, 32, 38, 46, 47, 52, 59, 60, 66, 75, 76, 80, 89 and 90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gusler et al U.S. Patent No. 6,938,057 B2 as applied to claims 1, 17, 33, 48, 61 and 77 above, and further in view of Anderson et al U.S. Patent No. 6,108,787.

As to claims 6, 16, 22, 32, 38, 47, 52, 60, 66, 76, 80 and 90, Gusler et al discloses executing, by the application server, the application program identified in the request, and transmitting, by the application server, the output of the application program over the application communication channel [column 5 line 65 to column 6 line 11].

Gusler et al does not teach a remote display protocol.

Anderson et al teaches a remote display protocol that is the Remote Desktop Protocol [column 14, lines 5-11].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Gusler et al so that the output of the application program would have been transmitted over an application communication channel via a remote display protocol that would have been the Remote Desktop Protocol.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Gusler et al by the teaching of Anderson et al because it

Application/Control Number: 10/709,806

Art Unit: 2131

allows a user in a more classified network to run an application on an information processing means (e.g. workstation in the less classified network while displaying the results of the session on the information processing means (e.g. workstation) in the more classified network [column 14, lines 5-11].

As to claims 15, 31, 46, 59, 75 and 89, the Gusler-Anderson combination teaches using the Independent Computing Architecture protocol for the remote display protocol [column 5 line 65 to column 6 line 11].

9. Claims 7, 23, 39, 53, 67 and 81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gusler et al U.S. Patent No. 6,938,057 B2 as applied to claims 1, 17, 33, 48, 61 and 77 above, and further in view of Anderson et al U.S. Patent No. 6,108,787.

As to claims 7, 23, 39, 53, 67 and 81, Gusler et al does not teach obtaining a MIME type document having a remote display client for the client application program.

Anderson et al teaches a remote display protocol that is the Remote Desktop Protocol [column 14, lines 5-11].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Gusler et al so that a MIME type document would have been obtained and would have had a remote display protocol that would have been the Remote Desktop Protocol for the client application program.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Gusler et al by the teaching of Anderson et al because it allows a user in a more classified network to run an application on an information processing means (e.g. workstation in the less classified network while displaying the results of the session

on the information processing means (e.g. workstation) in the more classified network [column 14, lines 5-11].

10. Claims 11, 27, 43, 57, 71 and 85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gusler et al U.S. Patent No. 6,938,057 B2 as applied to claims 1, 17, 33, 48, 61 and 77 above, and further in view of He et al U.S. Patent No. 6,088,451.

As to claim 11, Gusler et al does not teach obtaining a ticket granting access for a single use.

He et al teaches a ticket for single use only [column 29 line 49 to column 30 line 7].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Gusler et al so that the ticket that was granted would have been for a single use only.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Gusler et al by the teaching of He et al because this relieves a great burden from the system security administrator and inevitably increase the effectiveness of the network security mechanisms and the efficiency of network administration and management [column 30, lines 4-7].

Application/Control Number: 10/709,806 Page 13

Art Unit: 2131

. . .

Conclusion

11. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Aravind K. Moorthy whose telephone number is 571-272-3793.

The examiner can normally be reached on Monday-Friday, 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aravind K Moorthy April 11, 2006

CHRISTOPHER REVAL

Och 4/11/06